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ABSTRACT

This study examined how perceived teacher support of classroom questioning relates to other dimensions of teacher effectiveness, and how dimensions of teacher effectiveness are related to antecedents of classroom questioning. The study evaluated end-of-term ratings by college students (n=806) from 39 classes that suggested the following: (1) perceived teacher support of questioning is highly related to the effectiveness with which teachers present material (e.g., organization and enthusiasm) and their rapport with students; (2) teacher effectiveness dimensions of presentation and rapport influence the likelihood of students' classroom questioning in the same manner as perceived teacher support; (3) perceived teaching effectiveness and support of questioning are inversely related to the likelihood of student confusion; and (4) perceived support and effectiveness influence the likelihood of student questioning indirectly, by virtue of differences in whether students have questions and their hesitation to ask them. Suggested are further studies that include teacher self-ratings of effectiveness as well as classroom observations of student and teacher behavior. The appendix contains a sample of the Teacher Support of Questioning Scale. Contains 23 references. (Author/GLR)

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Help Seeking in College Classrooms: The Role of Perceived Teacher Support and Teacher Effectiveness in the Student Questioning Process

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Abstract

Previous research provided evidence that students' perceptions of teacher support influence the likelihood of student questioning in college classrooms. The present study examined: (a) how perceived teacher support of classroom questioning relates to other dimensions of teacher effectiveness; and (b) how dimensions of teacher effectiveness are related to antecedents of classroom questioning. End of term ratings by college students (N = 806) from 39 classes suggested the following conclusions: (a) perceived teacher support of questioning is highly related to the effectiveness with which teachers present material (e.g., organization and enthusiasm) and their rapport with students; (b) teacher effectiveness dimensions of presentation and rapport influence the likelihood of students' classroom questioning in the same manner as perceived teacher support; (c) perceived teaching effectiveness and support of questioning are inversely related to the likelihood of student confusion; and (d) perceived support and effectiveness influence the likelihood of student questioning indirectly by virtue of differences in whether students have questions and their hesitation to ask them. Suggested are further studies that include teacher self-ratings of effectiveness as well as classroom observations of student and teacher behavior.

Help Seeking in College Classrooms: The Role of Perceived Teacher Support and Teacher Effectiveness in the Student Questioning Process

There is increasing recognition that seeking help can be an adaptive, proactive strategy that facilitates learning (Ames, 1983; Karabenick & Knapp, 1991; Nelson-Le Gall, 1981, 1985; Nelson-Le Gall, Gumerman, & Scott-Jones, 1983). Learners who respond to comprehension deficiencies or lack of information by seeking persons in their environment who can redress these inadequacies are more likely to achieve their learning goals. Such students are active and self-regulating (Newman, 1992). This stands in marked contrast to earlier views that seeking assistance is antithetical to the *independence* required for high levels of achievement (e.g., Winterbottom, 1958). During the past decade, studies have examined both person and situation influences on the type and likelihood of help-seeking in classrooms, where it typically takes the form of student questioning. Concern about students' effective use of help in the classroom comes from evidence suggesting that questioning decreases in the later grades and in college (Dillon, 1981, 1986; Good, et al., 1987; Pollio, 1989).

Despite the growing number of studies in elementary and middle schools (e.g., Dillon, 1981; Good, et al., 1987; 1988; Nelson-Le Gall, 1987; Newman, 1990; van der Meij, 1986, 1988, 1990) there are few studies of questioning in college classrooms. Recently, Karabenick and Sharma (1991, 1992) expanded the study of college classroom questioning by examining its relation to students' use of other learning strategies and their perceptions of teacher support for questioning. One outcome of their work is a structural model that describes the antecedents of questioning likelihood, shown in Figure 1. Based on generic models of help-seeking (e.g., Gross & McMullen, 1983), its components include: students' awareness of comprehension inadequacy (i.e., confusion); having a question to ask; the costs of seeking help, conceptualized as inhibition to ask; and asking the teacher questions. Perceived support of questioning is included given the importance of teacher reactions to students' questions.

Among the antecedents of asking are the model's two exogenous variables of teacher support and student confusion. These are not causally linked since there is no *a priori* reason to assume causal priority of either variable. Direct causal paths are assumed between these exogenous variables and two endogenous variables: whether students have a question and inhibition, and these endogenous variables are proposed as the immediate antecedents of questioning. The model was evaluated at two levels of analysis: students within classes (controlling for between-class differences), and classes. As shown

in Figure 1, the model was supported (standardized coefficients are shown based on a LISREL procedure) with classes as the unit of analysis, and deviated by only one path, that between perceived support and having a question, at the individual student level.

An important element of the model is the indirect influence of teacher support on the likelihood of student questioning. At the individual student level of analysis within classrooms, perceived support affects asking by virtue of its direct influence on inhibition. At the class level of analysis, there is the additional influence of perceived support on the likelihood of having a question to ask. Furthermore, perceived teacher support was inversely related to student confusion. The influence of perceived teacher support on questioning can be summarized as follows: students who are more confused (and have more questions to ask) are also those who perceive lower levels of teacher support and are more hesitant to ask questions; their less confused classmates have fewer questions to ask but are more likely to ask them by virtue of perceiving higher levels of support and thus lower levels of inhibition.

Although classroom teacher support is demonstrably central to students' likelihood of asking questions, it is but one element in a larger context of teacher effectiveness. The purpose of the present study was to examine the manner in which support enters into that context. Specifically addressed are: (a) how perceived teacher support of classroom questioning relates to other dimensions of teacher effectiveness; and (b) how other dimensions of teacher effectiveness relate to components of the classroom questioning process.

While the dimensionality of teaching effectiveness remains an issue, recent work by Marsh (1991) provides a framework that has considerable empirical support. Based on the Students' Evaluations of Educational Quality (SEEQ), Marsh proposes the existence of nine first-order and four second-order factors. Relevant to the present study are the two second-order factors with direct reference to teachers' classroom behavior: Presenter and Rapport. The Presenter factor includes the value of the course, teacher enthusiasm, organization, and breadth of coverage. Rapport consists of group interaction and individual relations between teacher and students.

The first objective is to map perceived teacher support of questioning in the teacher effectiveness space, i.e., the degree to which support is related to Presenter and Rapport, as well as their constituent first-order factors. Since perceived support of questioning can be considered a component of general teaching effectiveness—better teachers are also more responsive to, and encourage, student questions—support should be related to both dimensions of effectiveness. We can also speculate that, since support of questioning is primarily concerned with interpersonal relations between teacher and student,

perceived support would relate more highly to Rapport than to Presenter effectiveness factors.

The second objective is to determine whether, and to what extent, teacher effectiveness relates to components of the questioning process. This will be accomplished by direct correlations with those components and by how teaching effectiveness factors enter into the proposed model of the classroom questioning process. One possibility is that the Presenter factor would be more highly correlated with the informational components of the model (students' level of confusion and whether they have questions), while the motivational component of inhibition would be more highly related to the interpersonal dimensions of teacher effectiveness, summarized by the higher-order Rapport factor of the SEEQ.

Method

Participants and Sampling Procedure

Participants were 806 students from 39 classes at a large comprehensive Midwestern university. The classes selected: (a) were either 50 or 75 minutes in length; (b) were not lab sections of large courses; and (c) had enrollments of between 10 and 40 students. Faculty members were contacted and asked to participate toward the end of the academic term.

Questionnaire and Procedure

Questionnaires were constructed to provide information about the classroom questioning process, teacher support of questioning, and teaching effectiveness. Surveys began with a general introductory section along with appropriate guarantees of confidentiality and anonymity. It was also emphasized to students that their instructors would not see their responses.

The questioning process. In the first section of the questionnaire, students provided information about their experiences with the questioning process by responding to the series of likelihood ratings used by Karabenick & Sharma (1992). The likelihood ratings were framed by directing students to consider times in class "when the teacher has been teaching or explaining something." Students estimated the likelihood (on a 10-point scale from 0 = absolutely no chance to 10 = absolutely certain to occur) that they experienced four states described above, namely: (a) whether they were confused, or did not understand what the teacher was teaching or explaining; (b) whether they had questions; (c) inhibition—whether they hesitated to ask questions they had; and (d) question asking. There were two likelihood estimates for each component. Confusion, question existence, and asking were in response to the following

statement: "How likely is it that when the teacher is teaching or explaining something in this class . . ." Confusion items were: "you are confused" and "you don't understand what he/she is saying." Items that measured the likelihood that students had questions were: "you have a question to ask" and "a question occurs to you." Items that measured whether students asked questions were: "you actually ask a question" and "you indicate to your teacher that you have a question (e.g., raise your hand)." Inhibition was in response to: "Suppose you had a question that you wanted to ask your teacher. How likely is it that you would . . ." The items were: "hesitate to ask it" and "consider asking it but decide not to."

Perceived teacher support of questioning. Individual differences in students' perceptions of teacher support for questioning were measured using a 12-item Likert scale (see Appendix) with anchors of "Not at all true" to Very true." The scale consisted of six two-item sub-scales that assessed the following perceived teacher behaviors and attitudes: (a) specific instructions to students to interrupt; (b) emotional response to questions; (c) how the teacher answers questions—degree of care; (d) value of questions; (e) responses to students—positive/negative reactions; and (f) providing time for questions. Analyses indicated that the scale is homogeneous given an alpha of .79 and the fact that a single factor emerged from a factor analysis of the six subscales. Only the combined TSQ scale score is considered in the present study.

Teacher effectiveness. As discussed above, the assessment of teacher effectiveness included the two higher-order dimensions of the SEEQ that relate to classroom interaction (see Marsh, 1991). The dimension that captures how well teachers present material (Presenter) consisted of four four-item subscales: Learning ("You found the course intellectually challenging and stimulating."); Enthusiasm ("Instructor was dynamic and energetic in conducting the course."); Organization ("Course materials were well prepared and carefully explained."); and Breadth ("Instructor contrasted the implications of various theories."). The dimension assessing interpersonal interaction in the classroom (Rapport) involved two four-item subscales: Group interaction ("Students were encouraged to participate in class discussions.") and Individual Rapport ("Instructor was friendly toward individual students."). It should be noted that one item on the group interaction scale focused on student questioning. Although constituting item overlap, thereby increasing the likelihood of relations between the TSQ and the group interaction scale, the item was retained to preserve the integrity of the SEEQ.

Results

Data Analysis

Following the technique used in previous studies (Karabenick, 1991; Karabenick and Sharma, 1992) described above, the likelihoods for each of the four questioning components, student ratings of teacher support for questioning (TSQ), and teacher effectiveness were analyzed in two ways. This technique consists of dividing the total covariance into that attributable to individual differences within classes and that due to between-class differences. The within-class analysis used scores obtained by subtracting from individual student ratings the mean rating of students in their respective classes. These constitute partially standardized (difference) scores that were then pooled across classes. The class/teacher unit of analysis (subsequently referred to as "classes") used the class means (i.e., ratings aggregated over all students within classes). Note that these means were unweighted by the number of students on which they were based. Significance of correlations based on individual scores have 804 *df*, while those for classes have 37 *df*, and all are two-tailed.

Teacher Support of Questioning and Individual SEEQ Scales

An examination of perceived teacher support and teacher effectiveness is provided by the correlations between the TSQ and the SEEQ factors shown in Table 1. Perceived teacher support is highly related, to approximately the same degree, to both higher-order dimensions of perceived teaching effectiveness. At the individual level of analysis the TSQ correlations with Presenter and Rapport are .75 and .69, respectively; for classes they are .83 and .84. As with the higher-order dimensions, the correlations for all of the first-order factors are substantial. The only first-order SEEQ factor that is consistently lower for both units of analysis is Enthusiasm, i.e., the rated dynamism, energy, and use of humor appears slightly less highly related to perceived support of questioning than are the other factors. Breadth is consistently more highly correlated. Nevertheless, these differences are not large and are within an overall positive covariance manifold. In fact, principle components analyses of the first-order SEEQ factors and the TSQ resulted in single factors (root one criterion) for both individual and class units of analysis, which accounted for 49% and 67% of the variance, respectively.

Perceived Teacher Support of Questioning and Teaching Effectiveness Related to the Questioning Process

Table 2 compares the way TSQ and the second-order SEEQ dimensions relate to questioning process components at the individual, and Table 3 at the class level of analysis. Given the high correlation between the SEEQ factors, similar

relationships between those dimensions and the questioning process components would be expected. This appears evident, and the correlations in Tables 2 and 3 are of similar magnitude across the process components. In general, TSQ, Presenter, and Rapport are inversely related to student confusion and inhibition, with very low relationships (albeit some significant) to whether students have a question and their likelihood of asking questions. To the extent that differences exist, there is a suggestion that the magnitude of correlations of the TSQ with confusion and hesitation are closer to those of the Presenter dimension of the SEEQ than with Rapport.

Comparisons of Structural Models of Classroom Questioning Involving Perceived Teacher Support of Questioning and Teaching Effectiveness

The structural models of the questioning process (see Figure 1) were evaluated using path analytic techniques since the number of class units was far below the minimum number suggested for maximum likelihood estimation (and since the models in previous work by Karabenick & Sharma (1992) were virtually identical whether or not measurement error was taken into consideration). Figure 2 presents the significant paths and standardized coefficients (*ß*s) using perceived support, Presenter, and Rapport based on the individual student level of analysis. Consistent with the substantial correlation between them, there is little difference between the models. As found previously (Karabenick, 1991; Karabenick & Sharma, 1992—see Figure 1), perceived teacher support is related to the rated likelihood of asking questions by virtue of its direct influence on students' hesitation to ask (i.e., inhibition) and indirect relation, via the level of confusion, to whether students have a question to ask. Furthermore, the magnitude of the coefficients found in the present study and those previously estimated are virtually identical (all within +/- .06). Students' ratings of how well their teachers present the material (Presenter) and ratings of interpersonal relations between teacher and student (Rapport) affect asking in the same way.

The resulting models and coefficients based on the class unit of analysis are shown in Figure 3. The model using the TSQ is dissimilar to that found previously (see Figure 1), in that the paths from perceived teacher support of questioning to whether students have a question to ask and to hesitation were not significant. Once again, identical models resulted when teacher effectiveness dimensions of Presenter and Rapport were substituted for the TSQ. While there is no evidence from the present study to support the influence of classroom differences in perceived support (TSQ) or teaching effectiveness (Presenter or Rapport) on the likelihood of asking questions, other aspects of the model are supported, namely the influence of confusion that is directly related to both having a question and inhibition.

Discussion

The evidence quite clearly establishes a close link between perceived teacher support of classroom questioning and other dimensions of teaching effectiveness. This conclusion stems from correlations between perceived support and other classroom interaction dimensions of teacher behavior. It is also inferred from the virtually identical manner in which support and other teacher effectiveness factors relate to the classroom questioning process. Specifically, based on analyses of students within classes, which had sufficient power, perceived support and effectiveness influence the likelihood of asking questions primarily by virtue of their affect on how inhibited students are to ask questions they have.

It thus appears that students' judgements of teacher support for questioning form part of a global assessment of teacher effectiveness. Despite Marshs' (1991) evidence supporting the hierarchical dimensionality of teaching effectiveness (9 first-order and 4 second-order factors using the SEEQ), there is no evidence from the present study to indicate that the dimensions mattered, or were distinct from the TSQ in their relationship to components of the questioning process. In addition, there is no evidence that the more informational dimensions of teacher effectiveness (Presenter) relate more highly to students' level of confusion than to their hesitation to ask, compared to dimensions that assess interpersonal teacher characteristics (Rapport). Rather, students appear to perceive in a global manner that teachers are both more or less effective and supportive of questioning.

At the individual student level of analysis, the present study replicates previous support for the proposed questioning process model (Karabenick & Sharma, 1992) that includes perceived teacher support for questioning. Furthermore, the same models obtain at the student level of analysis when substituting either Presenter of Rapport dimensions of teaching effectiveness. In both instances, students who perceive higher levels of teaching effectiveness are less likely to be confused, and have fewer questions to ask, but more likely to ask the questions they have. Conversely, students who are more confused and have more questions to ask perceive their teachers as less effective and are more hesitant to ask those questions.

Since direct evidence was not found in the present study for links between rated effectiveness (or support for questioning) and inhibition at the class level of analysis we cannot make the same claims about the affect of teaching effectiveness on questioning variance among classes (and presumably teachers). We can only surmise that effectiveness would probably have entered the structural model based on between class (teacher) covariance as it had

previously (Karabenick, 1991, Karabenick & Sharma, 1992) were there sufficient power in the present study (a larger number of class units).

One of the unresolved issues remains the degree to which perceived teacher support for questioning and other dimensions of teacher effectiveness exist in teachers' classroom behavior and how much is due to student perceptions. A step toward answering that question would be to obtain teacher self-ratings of effectiveness as well as support for questioning, and beyond that, classroom observations of both teacher behavior and student classroom questioning.

References

Ames, R. (1983). Help-seeking and achievement orientation: Perspectives from attribution theory. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 165-186). New York: Academic Press.

Dillon, J. T. (1981). A norm against student questions. *Clearing House, 55*, 136-139.

Dillon, J. T. (1986). Student questions and individual learning. *Educational Theory, 36*, 333-341.

Good, T. L., Slavings, R. L., Harel, K. H., & Emerson, H. (1987). a study of question asking in K - 12 classrooms. *Sociology of Education, 60*, 181-199.

Gross, A. A., & McMullen, P. A. (1983). Models of the help-seeking process. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 45-70). New York: Academic Press.

Karabenick, S. A.Class differences in perceived teacher support related to the likelihood of student classroom questioning. Presented at the annual meeting of the American Psychological Society, Washington, D.C.

Karabenick, S. A., & Knapp, J. R. (1991). Relationship of academic help seeking to the use of learning strategies and other instrumental achievement behavior in college students. *Journal of Educational Psychology, 83*, 221-230.

Karabenick, S. A., & Sharma, R. (1991, April). *Student classroom questioning: Its relation to motivation, learning strategy use, and perceived teacher support*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Karabenick, S. A., & Sharma, R. (1992). Perceived teacher support of student questioning in the college classroom: Its relation to student characteristics and role in the classroom questioning process. Manuscript submitted for publication.

Marsh, H. W. (1984). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases, and utility. *Journal of Educational Psychology, 76*, 707-754.

Marsh, H. W. (1991). Multidimensional students' evaluations of teaching effectiveness: A test of alternative higher-order structures. *Journal of Educational Psychology, 83*, 285-296.

Nelson-Le Gall, S. (1981). Help-seeking: An understudied problem-solving skill in children. *Developmental Review, 1*, 224-246.

Nelson-Le Gall, S. (1985). Help-seeking behavior in learning. In W. Gordon (Ed.), *Review of research in education* (Vol. 12, pp. 55-90). Washington, D. C.: American Educational Research Association.

Nelson-Le Gall, S. (1987). Necessary and unnecessary help-seeking in children. *Journal of Genetic Psychology, 148*, 53-62.

Nelson-Le Gall, S., Gumerman, R., & Scott-Jones, D. (1983). Instrumental help-seeking and everyday problem-solving. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in helping: Vol. 2. Help-seeking* (pp. 265-283). New York: Academic Press.

Newman, R. S. (1990). Children's help-seeking in the classroom: The role of motivational factors and attitudes. *Journal of Educational Psychology, 82*, 71-80.

Newman, R. S. (1992). Goals and self-regulated learning: What motivates children to seek academic help? In M. L. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement: Goals and self-regulatory processes*. Greenwich, CT: JAI Press.

Pollio, H. (1989). *Any questions please.* Knoxville: Teaching-learning issues (Learning Research Center, University of Tennessee).

Sharma, R., & Karabenick, S. A. (1989, August). *Students' questioning in the classroom and its relationship to help-seeking.* Paper presented at the annual convention of the American Psychological Association, New Orleans.

van der Meij, H. (1986). *Questioning: a study on the questioning behavior of elementary schoolchildren.* Den Haag: Stichting voor Onderzoek van her Onderwijs.

van der Meij, H. (1988). Constraints on question asking in classrooms. *Journal of Educational Psychology, 80*, 401-405.

van der Meij, H. (1990). Question asking: To know that you do not know is not enough. *Journal of Educational Psychology, 82*, 505-512.

Winterbottom, M. (1958). The relation of need for achievement to learning experiences in independence and mastery. In J. Atkinson (Ed.), *Motives in fantasy, action, and society* (pp. 453-478). Princeton, NJ: Van Nostrand.

Table 1

Relationships between teacher support of classroom questioning and dimensions of teaching effectiveness (SEEQ)

Dimension of Teaching Effectiveness (SEEQ)	Unit of analysis: Students within classes ($N = 806$)	Unit of analysis: Class ($N = 39$)
Presenter	.75***	.83***
Learning	.56***	.77***
Enthusiasm	.43***	.45**
Organization	.43***	.70***
Breadth	.57***	.81***
Rapport	.69***	.84***
Group interaction	.50***	.81***
Individual rapport	.61***	.73***

*$p < .05$ **$p < .01$ ***$p < .001$

Table 2

Relationships of teacher support of classroom questioning and dimensions of teaching effectiveness to components of the classroom questioning process — individual students as the unit of analysis (N = 806)

	Component of the questioning process			
Dimension	Confusion	Have a Quest.	Inhibition	Ask
Teacher Support (TSQ)	-.23***	-.08*	-.22***	.07*
Presenter (SEEQ)	-.20***	-.10**	-.20***	.01
Rapport (SEEQ)	-.14**	-.11**	-.13**	-.02

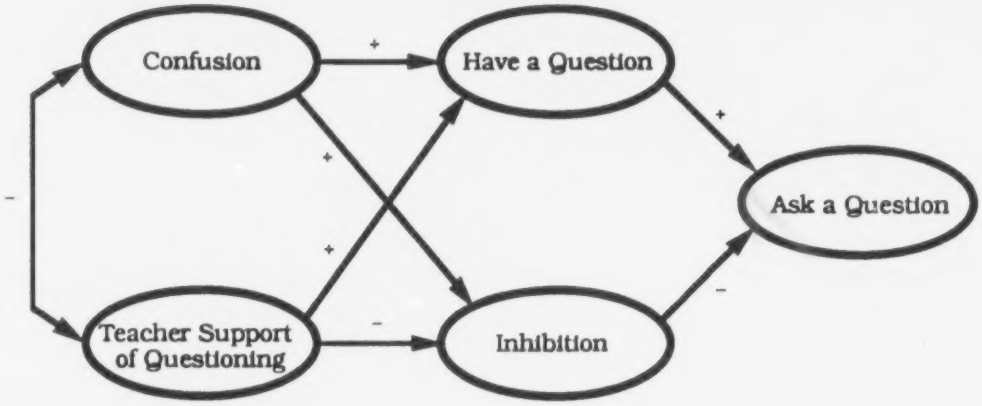
*$p < .05$ **$p < .01$ ***$p < .001$

Table 3

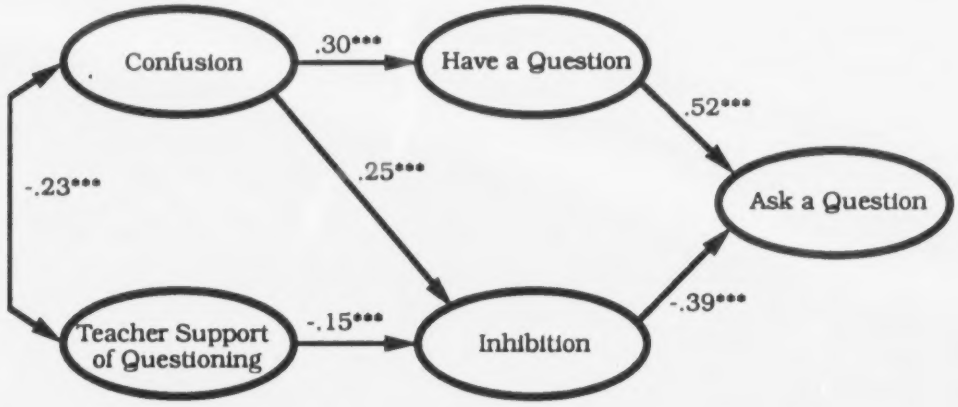
Relationships of teacher support of classroom questioning and dimensions of teaching effectiveness to components of the classroom questioning process — class as the unit of analysis (N = 39)

	Component of the questioning process			
Dimension	Confusion	Have a Quest.	Inhibition	Ask
Teacher Support (TSQ)	-.50**	-.05	-.41**	.12
Presenter (SEEQ)	-.55**	-.25	-.31	-.11
Rapport (SEEQ)	-.37*	-.03	-.24	.04

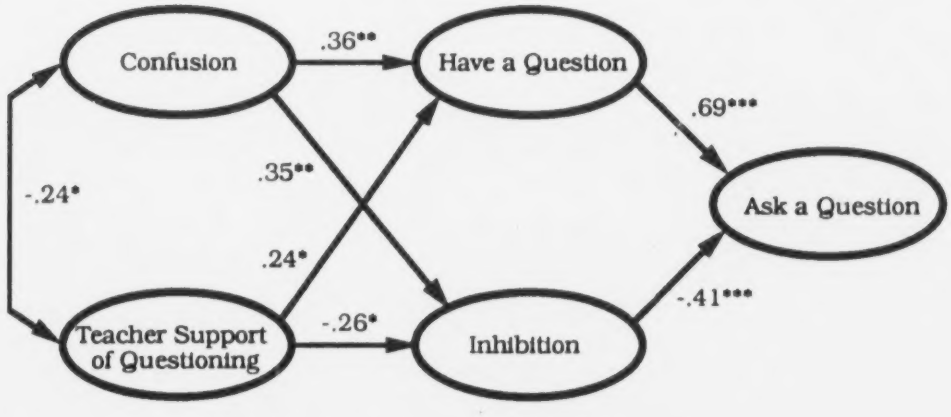
*$p < .05$ **$p < .01$ ***$p < .001$



Proposed Model of the Classroom Questioning Process



Final Model — Individual Student as Unit of Analysis



Final Model — Class as Unit of Analysis

Figure 1. Models of the Classroom Questioning Process *(Karabenick & Sharma, 1992)*

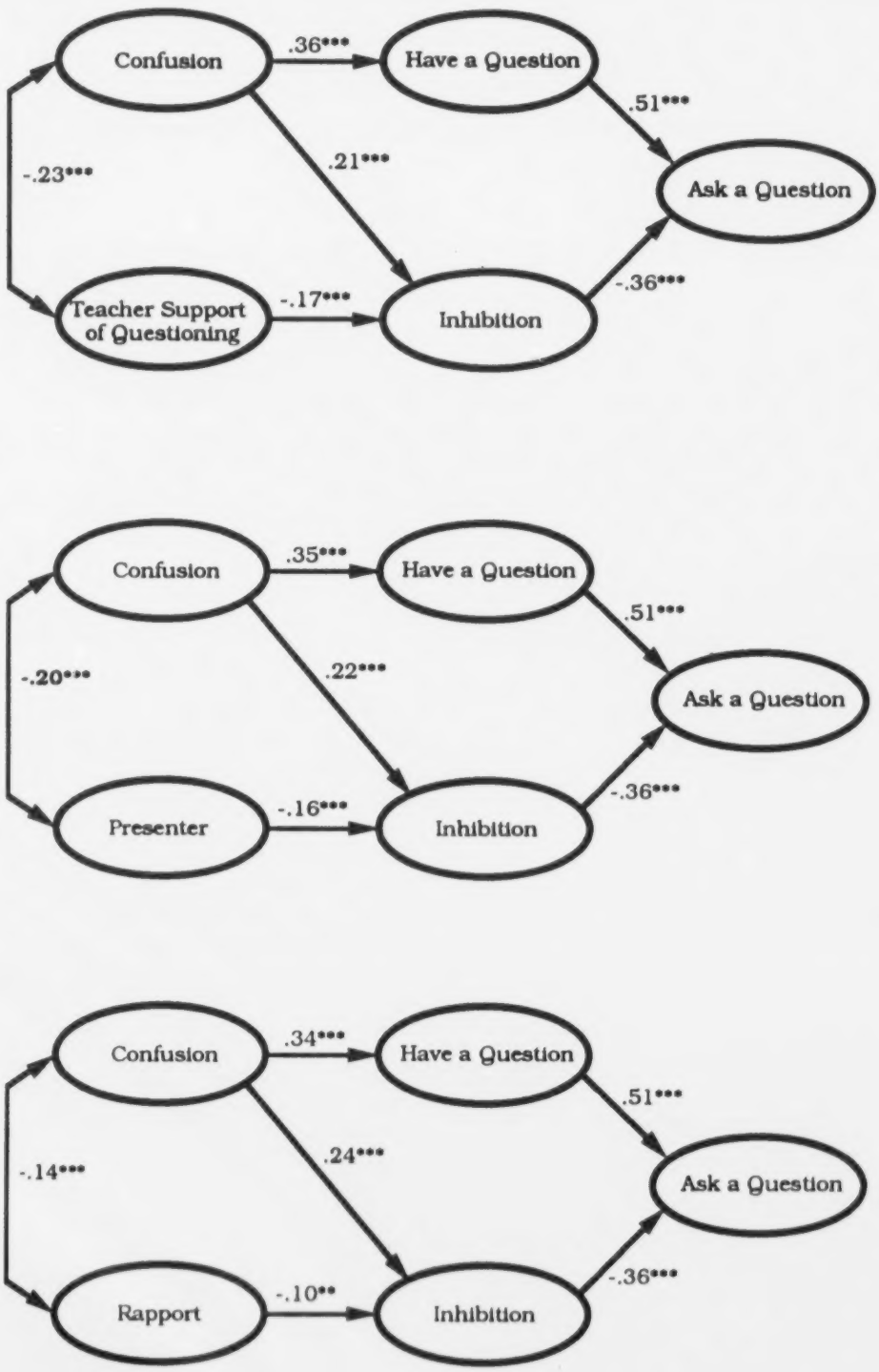


Figure 2. Final Models — Individual Student as Unit of Analysis

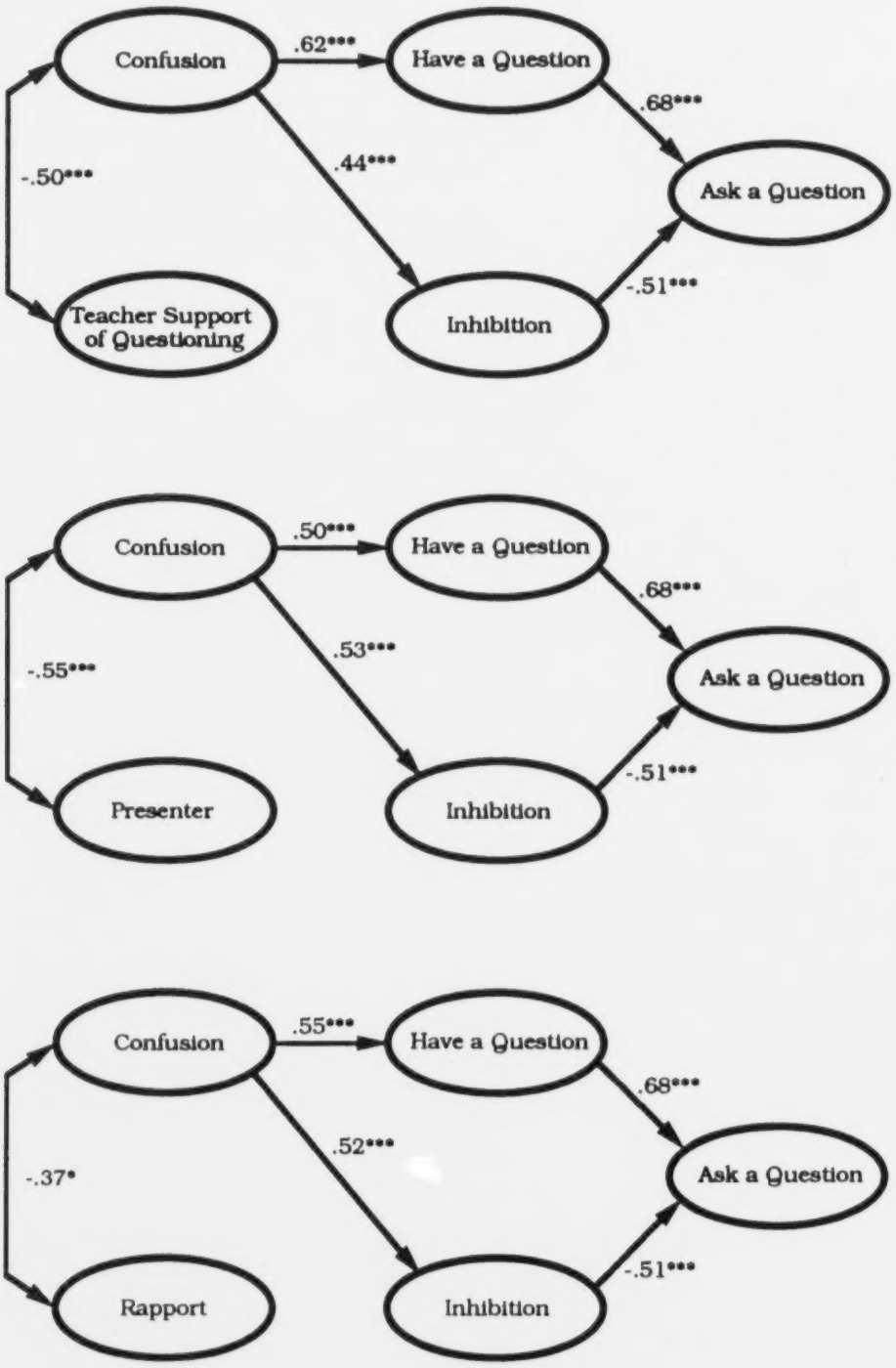


Figure 3. Final Models — Class as Unit of Analysis

Appendix

Teacher Support of Questioning Scale

Below is a series of statements. Please respond to each one by indicating the degree to which they describe the teacher **in this class when he/she is teaching or explaining something.** Please keep in mind that there are no right or wrong answers; just respond as accurately as possible. Remember, ***the statements below are to refer to times in class when your teacher is teaching or explaining something.***

Please place a number in the blank before each statement using the following scale:

1 Not at all true 2 3 4 5 Very true

_____ Your teacher tells students to interrupt him/her whenever they have a question. (A)

_____ Your teacher typically gets annoyed when students ask questions. (B)*

_____ Your teacher responds to questions by trying to answer them as carefully and thoroughly as he/she can. (C)

_____ Your teacher believes that student questions take up class time more profitably spent by teaching or explaining the material. (D)*

_____ Your teacher compliments students who ask questions. (E)

_____ Your teacher let it be known that students should not interrupt him/her for questions. (A)*

_____ Your teacher provides sufficient time for students to ask questions. (F)

_____ Your teacher responds to questions by answering them as briefly as possible so that he/she can return to what he/she was saying. (C)*

_____ Your teacher generally feels good when students ask questions. (B)

_____ Your teacher doesn't stop for questions once he/she begins talking. (F)*

_____ Your teacher believes that student questions are important. (D)

_____ Your teacher is sometimes harsh with students who ask questions. (E)*

Subscales

A—Specific instructions
B—Emotional response to questions
C—How teacher answers questions
D—Value of questions
E—Response to students
F—Providing time for questions
*Items to be reverse scored